NUTRITIONAL STATUS OF PRIMARY SCHOOL CHILDREN (AGE 6 - 12 YEARS) AND CERTAIN RELATED SOCIO-ECONOMIC FACTORS IN KIANDANI SUB-LOCATION, IVETI LOCATION, MACHAKOS DISTRICT.

BY

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THIS THESIS IS MY ORIGINAL WORK AND HAS NOT BEEN PRESENTED FOR A DEGREE IN ANY OTHER UNIVERSITY.

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I

ABSTRACT

This paper presents the anthropometric, clinical and dietary findings of a nutritional survey carried out in primary schools in Kiandani Sub-location, Iveti Location of Machakos District.

The preparation of this paper took a period of about nine months: three of these were spent in the actual survey in the field, and six months were spent analysing the data and writing up the thesis.

The survey was carried out during the second school term in the months of May to July 1976. During this period almost all families were found to be obtaining most of their foods from their "Shambas" and there appeared to be no shortage of food.

The study consisted of a demographic, socio-economic, clinical, anthropometric, biochemical and dietary survey of a sample of primary school children aged between 6 and 12 years. Both males and females were covered in the study. Most of the socio-economic data was collected by personal observations of homes and interviews of the parents.

II

Background information relevant to the survey was obtained by interviews of civil, educational, and health authorities in the area and from documents written on Machakos District.

This paper attempts to assess the nutritional status of 121 primary school children (62 boys and 159 girls) selected by random sampling and the effect of various socio-economic factors on the nutritional status of these children. Anthropometry and nutritional deficiency signs had been used as major indices in the assessment of the nutritional status of these children.

Harvard standards were used and any child whose anthropometric measurements fell below 80% of standard for weight-for-age, weight-for-height, mid-upper-arm-circumference-for-age and triceps skinfold thickness were considered malnourished. On the other hand 90% of standard for Height-for-age was considered as a point below which malnutrition was registered. The various percentagesie 90% standard for the linear measurement and 80% standard for circular measurements were chosen because muscle tissues and body fat are more easily and rapidly affected by the quality of nutrition than height.

III

The anthropometric findings showed that most of these children (94.2%) had acceptable values of weight-for-age, weight-for-height and mid-upper-arm-circumference-for-age, while (99.2%) had acceptable standards of height-for-age. On the other hand 67.2% of these children showed low values of triceps skinfold thickness.

A number of deficiency signs were looked for on this sample. The most common signs were found to be: angular stomatitis (51.1%), conjuntival xerosis (19.6%) anaemia (18.1%) parotid enlargement (7.4%) and hepatomegaly (6.9%).

Intestinal parasitism was also looked for and 36.4% of the children were found to have intestinal parasites. The most common parasites were found to be as follows: Ascaris Lumbricoides (25.5%), Schistosoma Mansoni (6.6%) and Trichuris Trichuria (3.2%).

None of the children was found to have three or more deficiency signs a criterion which could have been used to classify them as malnourished - (Jelliffe, 1969).

No relationship was found between the anthropometry and the deficiency signs in this sample.

IV

The following socio-economic factors were found to be related to nutritional status of the children; level of education and level of income of parents; family size; source of water supply; and use of latrines. Children from parents of higher socio-economic status were found to have higher values of anthropometric measurements and fewer nutritional deficiency signs and intestinal parasites. Marital status of the mothers had no significant influence on the nutritional status of the children.

The foregoing is a brief summary of the contents of this thesis.

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